



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/808,964A

DATE: 08/20/2004

TIME: 10:35:11

Input Set : A:\AM100878 CIP.txt

Output Set: N:\CRF4\08202004\J808964A.raw

3 <110> APPLICANT: Meng, Xiang-Jin  
 4 Fenaux, Martijn  
 5 Halbur, Patrick G.  
 7 <120> TITLE OF INVENTION: Chimeric Infectious DNA Clones, Chimeric Porcine Circoviruses and

8 Uses Thereof

10 &lt;130&gt; FILE REFERENCE: AM100878 CIP

12 &lt;140&gt; CURRENT APPLICATION NUMBER: 10/808,964A

13 &lt;141&gt; CURRENT FILING DATE: 2004-03-25

15 &lt;160&gt; NUMBER OF SEQ ID NOS: 32

17 &lt;170&gt; SOFTWARE: PatentIn version 3.2

19 &lt;210&gt; SEQ ID NO: 1

20 &lt;211&gt; LENGTH: 1768

21 &lt;212&gt; TYPE: DNA

22 &lt;213&gt; ORGANISM: Porcine circovirus

24 &lt;400&gt; SEQUENCE: 1

25 aaatttctga	caaacgttac	agggtgtc	tctgcaacgg	tcaccagact	cccgctctcc	60
27 aacaaggta	tcacagcagt	agacaggta	ctccgttg	ctttagatcg	aggagctcca	120
29 cattcaataa	gtaagttgcc	ttctttactg	caatattctt	tattctgctg	atcagttcct	180
31 ttgctttct	cgatatggca	gcgggcaccc	aaataccact	tcactttatt	aaaagttgc	240
33 ttcttcacaa	aattagcgaa	cccctggagg	tgagggttgc	gtccttcctc	attaccctcc	300
35 tcgccaacaa	taaaataatc	aaataggggag	attgggagct	cccgatattt	cttgcgctcg	360
37 tcttcggaaag	gattattcag	cgtgaacacc	cacctttat	gtgggtgggg	tccgcttctt	420
39 ccattttct	tgctgggcat	gttgctgctg	aggtgctgcc	gaggtgctgc	cgctgcccga	480
41 gtgcgctgg	aataacttaca	gcgcacttct	ttcggttca	gctatgacgt	atccaaggag	540
43 gctttaccgc	agaagaagac	accgcaccccg	cagccatctt	gccagatcc	tccggcccg	600
45 cccctggctc	gtccacccccc	gccacccgta	ccgttgaga	agaaaaaaatg	gcatcttcaa	660
47 caccgcctc	tcccgacac	tcgatatac	tgtcaaggct	accacagtca	gaacgcctc	720
49 ctggcggtg	gacatgatga	gatttaat	tgacgactt	gttccccgg	gagggggggac	780
51 caacaaaatc	tctataccct	ttgaatacta	cagaataaga	aaggtaagg	ttgaattctg	840
53 gcccgtctc	cccatcaccc	agggtgatag	gggagttggc	tccactgctg	ttattctaga	900
55 tgataactt	gtaacaaagg	ccacagccct	aacctatgac	ccatatgtaa	actactcctc	960
57 cccgcataca	atcccccaac	ccttctctta	ccactcccg	tacttcacac	ccaaacctgt	1020
59 tcttgactcc	accattgatt	acttccaacc	aaataacaaa	aggaatcgc	tttggatgag	1080
61 gctacaacc	tctagaaatg	tggaccacgt	aggcctccgc	actgcgttcg	aaaacagttat	1140
63 atacgaccag	gactacaata	tccgtgtaac	catgtatgt	caattcagag	aatttaatct	1200
65 taaagacccc	ccacttaaac	cctaaatgaa	taataaaaaac	cattacgaag	tgataaaaaaa	1260
67 gactcgtaa	tttatttcat	atggaaattc	agggcatgg	ggggaaaggg	tgacgaactg	1320
69 gcccccttcc	tccgtggatt	gttctgttagc	attcttccaa	aataccaaga	aagtaatcct	1380
71 ccgatagaga	gcttctacag	ctgggacagc	agttgaggag	taccattcca	acggggctcg	1440
73 attgctggta	atcagaatac	tgccggccaa	aaaaggta	gttccacctt	tagtctctac	1500
75 agtcaatgga	tatcgatcac	acagtctcag	tagatcatcc	cacggcagcc	agccataaaaa	1560
77 gtcataata	acaaccactt	cttcaccatg	gtaaccatcc	caccacttgt	ttcttaggtgg	1620
79 ttccagtt	gtggttccg	ggtctgaaa	attagcagcc	catttgctt	taccacaccc	1680

ENTERED

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173 tatgtaaact actcctcccg ccataacaatc ccccaaccct ttccttacca ctcccggtac 480  
 175 ttcacacccca aacctgttct tgactccacc attgattact tccaaacccaa taacaaaagg 540  
 177 aatcagcttt gcatggggct acaaaccctct agaaatgtgg accacgtagg cctccggact 600  
 179 gcgttcgaaa acagtatata cgaccaggac tacaatatcc gtgttaaccat gtatgtacaa 660  
 181 ttcagagaat ttaatcttaa agaccccccctt cttaaaccctt aa 702  
 184 <210> SEQ ID NO: 4  
 185 <211> LENGTH: 233  
 186 <212> TYPE: PRT  
 187 <213> ORGANISM: Porcine circovirus  
 189 <400> SEQUENCE: 4  
 191 Met Thr Tyr Pro Arg Arg Arg Tyr Arg Arg Arg His Arg Pro Arg  
 192 1 5 10 15  
 195 Ser His Leu Gly Gln Ile Leu Arg Arg Arg Pro Trp Leu Val His Pro  
 196 20 25 30  
 199 Arg His Arg Tyr Arg Trp Arg Arg Lys Asn Gly Ile Phe Asn Thr Arg  
 200 35 40 45  
 203 Leu Ser Arg Thr Phe Gly Tyr Thr Val Lys Ala Thr Thr Val Arg Thr  
 204 50 55 60  
 207 Pro Ser Trp Ala Val Asp Met Met Arg Phe Asn Ile Asp Asp Phe Val  
 208 65 70 75 80  
 211 Pro Pro Gly Gly Thr Asn Lys Ile Ser Ile Pro Phe Glu Tyr Tyr  
 212 85 90 95  
 215 Arg Ile Arg Lys Val Lys Val Glu Phe Trp Pro Cys Ser Pro Ile Thr  
 216 100 105 110  
 219 Gln Gly Asp Arg Gly Val Gly Ser Thr Ala Val Ile Leu Asp Asp Asn  
 220 115 120 125  
 223 Phe Val Thr Lys Ala Thr Ala Leu Thr Tyr Asp Pro Tyr Val Asn Tyr  
 224 130 135 140  
 227 Ser Ser Arg His Thr Ile Pro Gln Pro Phe Ser Tyr His Ser Arg Tyr  
 228 145 150 155 160  
 231 Phe Thr Pro Lys Pro Val Leu Asp Ser Thr Ile Asp Tyr Phe Gln Pro  
 232 165 170 175  
 235 Asn Asn Lys Arg Asn Gln Leu Trp Met Arg Leu Gln Thr Ser Arg Asn  
 236 180 185 190  
 239 Val Asp His Val Gly Leu Gly Thr Ala Phe Glu Asn Ser Ile Tyr Asp  
 240 195 200 205  
 243 Gln Asp Tyr Asn Ile Arg Val Thr Met Tyr Val Gln Phe Arg Glu Phe  
 244 210 215 220  
 247 Asn Leu Lys Asp Pro Pro Leu Lys Pro  
 248 225 230  
 251 <210> SEQ ID NO: 5  
 252 <211> LENGTH: 30  
 253 <212> TYPE: DNA  
 254 <213> ORGANISM: Porcine circovirus  
 256 <400> SEQUENCE: 5  
 257 gaaccgcggg ctggctgaac ttttgaaagt 30  
 260 <210> SEQ ID NO: 6  
 261 <211> LENGTH: 30  
 262 <212> TYPE: DNA

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263 <213> ORGANISM: Porcine circovirus  
 265 <400> SEQUENCE: 6  
 266 gcaccgcgga aatttctgac aaacgttaca 30  
 269 <210> SEQ ID NO: 7  
 270 <211> LENGTH: 21  
 271 <212> TYPE: DNA  
 272 <213> ORGANISM: Porcine circovirus  
 274 <400> SEQUENCE: 7  
 275 tttggtaacc gaaggccgat t 21  
 278 <210> SEQ ID NO: 8  
 279 <211> LENGTH: 24  
 280 <212> TYPE: DNA  
 281 <213> ORGANISM: Porcine circovirus  
 283 <400> SEQUENCE: 8  
 284 attggtaacct ccgtggattg ttct 24  
 287 <210> SEQ ID NO: 9  
 288 <211> LENGTH: 39  
 289 <212> TYPE: DNA  
 290 <213> ORGANISM: Porcine circovirus  
 292 <400> SEQUENCE: 9  
 293 gaagtttaacc ctaaatgaat aaaaataaaa accattacg 39  
 296 <210> SEQ ID NO: 10  
 297 <211> LENGTH: 37  
 298 <212> TYPE: DNA  
 299 <213> ORGANISM: Porcine circovirus  
 301 <400> SEQUENCE: 10  
 302 ggtggcgcct ccttggatac gtcatcctat aaaagtg 37  
 305 <210> SEQ ID NO: 11  
 306 <211> LENGTH: 30  
 307 <212> TYPE: DNA  
 308 <213> ORGANISM: Porcine circovirus  
 310 <400> SEQUENCE: 11  
 311 aggttataag tggggggct ttaagattaa 30  
 314 <210> SEQ ID NO: 12  
 315 <211> LENGTH: 27  
 316 <212> TYPE: DNA  
 317 <213> ORGANISM: Porcine circovirus  
 319 <400> SEQUENCE: 12  
 320 ggaaacgtta ccgcagaaga agacacc 27  
 323 <210> SEQ ID NO: 13  
 324 <211> LENGTH: 35  
 325 <212> TYPE: DNA  
 326 <213> ORGANISM: Porcine circovirus  
 328 <400> SEQUENCE: 13  
 329 actatacgtt tttattcatt tagagggtct ttcag 35  
 332 <210> SEQ ID NO: 14  
 333 <211> LENGTH: 29  
 334 <212> TYPE: DNA  
 335 <213> ORGANISM: Porcine circovirus

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Input Set : A:\AM100878 CIP.txt  
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337 <400> SEQUENCE: 14  
 338 tacgggcatg catgacgtgg ccaaggagg 29  
 341 <210> SEQ ID NO: 15  
 342 <211> LENGTH: 36  
 343 <212> TYPE: DNA  
 344 <213> ORGANISM: Porcine circovirus  
 346 <400> SEQUENCE: 15  
 347 agacgagatc tatgaataat aaaaaccatt acgaag 36  
 350 <210> SEQ ID NO: 16  
 351 <211> LENGTH: 31  
 352 <212> TYPE: DNA  
 353 <213> ORGANISM: Porcine circovirus  
 355 <400> SEQUENCE: 16  
 356 cgtaagcatg cagctgaaaa cgaaagaagt g 31  
 359 <210> SEQ ID NO: 17  
 360 <211> LENGTH: 24  
 361 <212> TYPE: DNA  
 362 <213> ORGANISM: Porcine circovirus  
 364 <400> SEQUENCE: 17  
 365 gctgaacttt tgaaaagtgaag cggg 24  
 368 <210> SEQ ID NO: 18  
 369 <211> LENGTH: 26  
 370 <212> TYPE: DNA  
 371 <213> ORGANISM: Porcine circovirus  
 373 <400> SEQUENCE: 18  
 374 tcacacagtc tcaagtagatc atccca 26  
 377 <210> SEQ ID NO: 19  
 378 <211> LENGTH: 21  
 379 <212> TYPE: DNA  
 380 <213> ORGANISM: Porcine circovirus  
 382 <400> SEQUENCE: 19  
 383 ccaacttgt aacccccc tcc a 21  
 386 <210> SEQ ID NO: 20  
 387 <211> LENGTH: 18  
 388 <212> TYPE: DNA  
 389 <213> ORGANISM: Porcine circovirus  
 391 <400> SEQUENCE: 20  
 392 gtggacccac cctgtgcc 18  
 395 <210> SEQ ID NO: 21  
 396 <211> LENGTH: 20  
 397 <212> TYPE: DNA  
 398 <213> ORGANISM: Porcine circovirus  
 400 <400> SEQUENCE: 21  
 401 ccagctgtgg ctccat taa 20  
 404 <210> SEQ ID NO: 22  
 405 <211> LENGTH: 29  
 406 <212> TYPE: DNA  
 407 <213> ORGANISM: Porcine circovirus  
 409 <400> SEQUENCE: 22

**VERIFICATION SUMMARY**

PATENT APPLICATION: **US/10/808,964A**

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Input Set : **A:\AM100878 CIP.txt**

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